

U. S. FISH AND WILDLIFE SERVICE

ENVIRONMENTAL ACTION STATEMENT FOR CATEGORICAL EXCLUSION

Within the spirit and intent of the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA), and other statutes, orders, and policies that protect fish and wildlife resources, I have established the following administrative record and determined that the following proposed action is categorically excluded from NEPA documentation requirements consistent with 40 CFR 1508.4, 43 CFR 46.210 and 516 DM 8.5.

Purpose and Need: In recent years (2012-2015), an increase in precipitation and timing of precipitation in areas with highly susceptible fine soils has favored the growth of the invasive species Sahara mustard (*Brassica tournefortii*) and caused a dramatic increase in the number of individuals and its distribution across the Refuge. *Brassica tournefortii* is a very advantageous plant and can produce a lot of seed. Trader et al. (2006) collected 135 Sahara mustard plants and found the plants produced 996 seeds (± 222); though they also found seed production increased with biomass and some plants in their study produced >16,000 seeds. Research done on the Mohawk dunes on the Barry M. Goldwater Range just north of the Refuge found Sahara mustard has a very high germination rate (>80%) relative to other native species (<30%) occurring within the same habitat. Sahara mustard also flowers and sets seed before many native plants have fully developed and reproduced (Trader et al 2006).

The Cabeza Prieta National Wildlife Refuge (CPNWR) Comprehensive Conservation Plan (FWS 2007, Page 571) stated "Where new or isolated small infestations of invasive plants are located, refuge staff will eradicate them using hand pulling or appropriate chemical means to prevent the spread of infestations" for limiting the spread of invasive species, including *Brassica tournefortii*. To date the Refuge has used hand pulling to control *Brassica tournefortii* because the occurrence *Brassica tournefortii* had been infrequent and in groups small enough to be controlled by hand pulling. Unfortunately, with the recent spread of *Brassica tournefortii* on the refuge, this method has been limited in its effectiveness. In the case of *Brassica tournefortii*, a removal method that does not completely remove all reproductive individuals or close will lead to increased productivity in those which remain.

Proposed Action and Alternatives.

I. No Action:

The no action alternative will continue the current practice of hand pulling plants. Refuge employees, interns, and volunteers have been employing this method since 2012 in three main locations along El Camino del Diablo; Camp Grip (USCBP FOB), Pinta Sands and the Tule Dessert. In the past, hand pulling effort has had negligible results.

This alternative will allow Sahara mustard to continue expanding. We have already seen it take the place of native plant species in a fragile dune habitat and become the dominant if not singular plant species in wide areas of the roadside that in the past experienced much greater species richness.

II. Proposed Action:

The proposed action is to use chemical treatment as a means of controlling *Brassica tournefortii*, within the non-wilderness 200 foot buffer of the El Camino del Diablo public road on Cabeza Prieta National Wildlife Refuge. Based on the observed emergence of *Brassica tournefortii* along the El Camino del Diablo in December 2016; three treatment areas have been identified (Map 1.). The treatment areas, in order of priority are:

1. Treatment A: West side of Pinta Sands

2. Treatment B: East side of Pinta Sands
3. Treatment C: Customs and Border Protection Camp Grip

The proposed action will consist of using back pack sprayers to apply glyphosate (RoundUp Pro) to the basal rosette. Spraying the plant at this stage will require less chemical and will occur as early as December or as late as February but timing will be entirely dependent on rain and plant emergence. Also, this timing will ensure most native plants are not above ground to eliminate or significantly lessen incidental mortality of natives. All employees/assistants spraying will be trained in herbicide application and plant identification to ensure the correct species is targeted. Focusing on the roadside allows us to control the *Brassica tournefortii* where it is most dense (the most seed is being produced) and at the point where new seed is being picked up and moved or dropped by vehicles.

Spraying is proposed to take place in the treatment areas described above from February 13 – 17, 2017.

III. Action Selected:

The proposed action was selected. The proposed action was selected over the no action because it will effectively control *Brassica tournefortii* and help the refuge restore native plant richness and distribution. We have chosen this action because the distribution and density of Sahara mustard has increased so dramatically over the last 4 years and hand pulling has had no effect on the continued expansion of the species on the Refuge.

The no action will result in the continued spread of *Brassica tournefortii*. Hand pulling has been tested and shown to be ineffective at reducing or controlling *Brassica tournefortii* at its current density and distribution on the refuge. Hand pulling may be used again in the future if chemical control brings the distribution of *Brassica tournefortii* back to a more manageable range.

An Invasive Pest Management Plan and EA are in progress to address invasive species management for the entire refuge. However, because *Brassica tournefortii* distribution and density has increased in severity so rapidly over the past years and in an attempt to hold back further seed spread, the refuge will treat *Brassica tournefortii* along selected sections of the ECCD and only in the non-wilderness corridor.

Categorical Exclusion(s).

516 DM 8.5 B (9) Minor changes in existing master plans, comprehensive conservation plans, or operations, when no or minor effects are anticipated. Examples could include minor changes in the type and location of compatible public use activities and land management practices.

The categorical exclusion above covers the proposed action because the CPNWR Comprehensive Conservation Plan Wilderness Stewardship Plan (USFWS 2007) Goal 1 Wildlife and Habitat Management, Objective 20, strategy #3 states: Where new or isolated small infestations of invasive plants are located, refuge staff will eradicate them using hand pulling or **appropriate chemical means** to prevent the spread of infestations.

Permits/Approvals.

1. From the 2006 Biological Opinion (BO) for the CPNWR Comprehensive Conservation Plan (CCP), the proposed action will “result in net beneficial effects to Sonoran pronghorn. For example, monitoring and controlling exotic/non-native plant species and removing trespass livestock would benefit pronghorn and pronghorn habitat (i.e., maintain and improve forage conditions; reduce or prevent introduction/spread non-native plants, spread of disease to wildlife, and competition between livestock and pronghorn for forages resources; etc.)”

Further, the proposed action to control non-native plant species should benefit lesser long-nosed bat foraging habitat by reducing or preventing the introduction/spread of non-native plants (USFWS, 2006).

The conclusions determined from the BO for the Sonoran pronghorn and the lesser long-nosed bat is that the proposed actions, which include the management of non-native plants, is not likely to jeopardize the continued existence of either species.

2. To protect prehistoric and historic objects in the treatment area the following will be employed:
 - All vehicles will remain within 50 ft. of the El Camino del Diablo centerline.
 - All herbicide treatment will be completed by individuals walking and hand spraying using backpack sprayers. Walking and hand spraying will ensure only Sahara mustard plants receive herbicide treatment.
 - Individuals working on the project will be instructed prior to the start of work to not step on or treat with herbicide any prehistoric or historic artifact.
 - Individuals working on the project will be notified prior to the start of work on the historical significance of the El Camino del Diablo and the laws which prevent the collection or disturbance of cultural artifacts.

Based on these mitigation measures, the proposed action will result in no adverse effect on National Register properties under the National Historic Preservation Act of 1966, as amended in 1992.

3. Herbicide will be applied directly to each plant using a small stream nozzle in a small enough concentration to be completely absorbed by the plant. Glyphosate is transmitted through plant tissue, is nonselective, and has no soil activity. Based on this, the proposed action will result in no violation of the Clean Water Act.

Public Involvement/Interagency Coordination.

In February, 2016, refuge staff hosted a meeting with interested members of the public and *Brassica tournefortii* researchers from the University of Arizona to discuss the distribution of *Brassica tournefortii* on the Pinta Sands (one of the main areas on the refuge affected by *Brassica tournefortii*), means of controlling *Brassica tournefortii*, and the potential use of chemicals for controlling invasive plants. The Pinta Sands is a very unique part of the refuge visually and biologically with a variety of native plants, some not seen elsewhere on the refuge. Many visitors travel to this area to see the unique plant assemblages, especially when in bloom and individuals present at this meeting were concerned about *Brassica tournefortii* out competing native plants and changing plant communities on the Pinta Sands.

The Categorical Exclusion and Environmental Action Statement will be available for public review and comment at the Cabeza Prieta National Wildlife Refuge Visitor Center, Ajo Public Library, U.S. Post Office in Ajo, Arizona and on the refuge website at http://www.fws.gov/refuge/Cabeza_Prieta/ until February 3, 2017. Please provide comments in writing to Mary Kralovec, Assistant Refuge Manager at Mary_Kralovec@fws.gov or at CPNWR, Attn: Mary Kralovec, 1611 N. Second Ave, Ajo, Arizona 85321.

Supporting Documents.

Supporting documents for this determination include relevant office file material and the following key references:

1. NEPA Compliance Checklist
2. Map 1. Proposed *Brassica tournefortii* treatment areas on CPNWR.
3. Photos of *Brassica tournefortii*

Literature Cited:

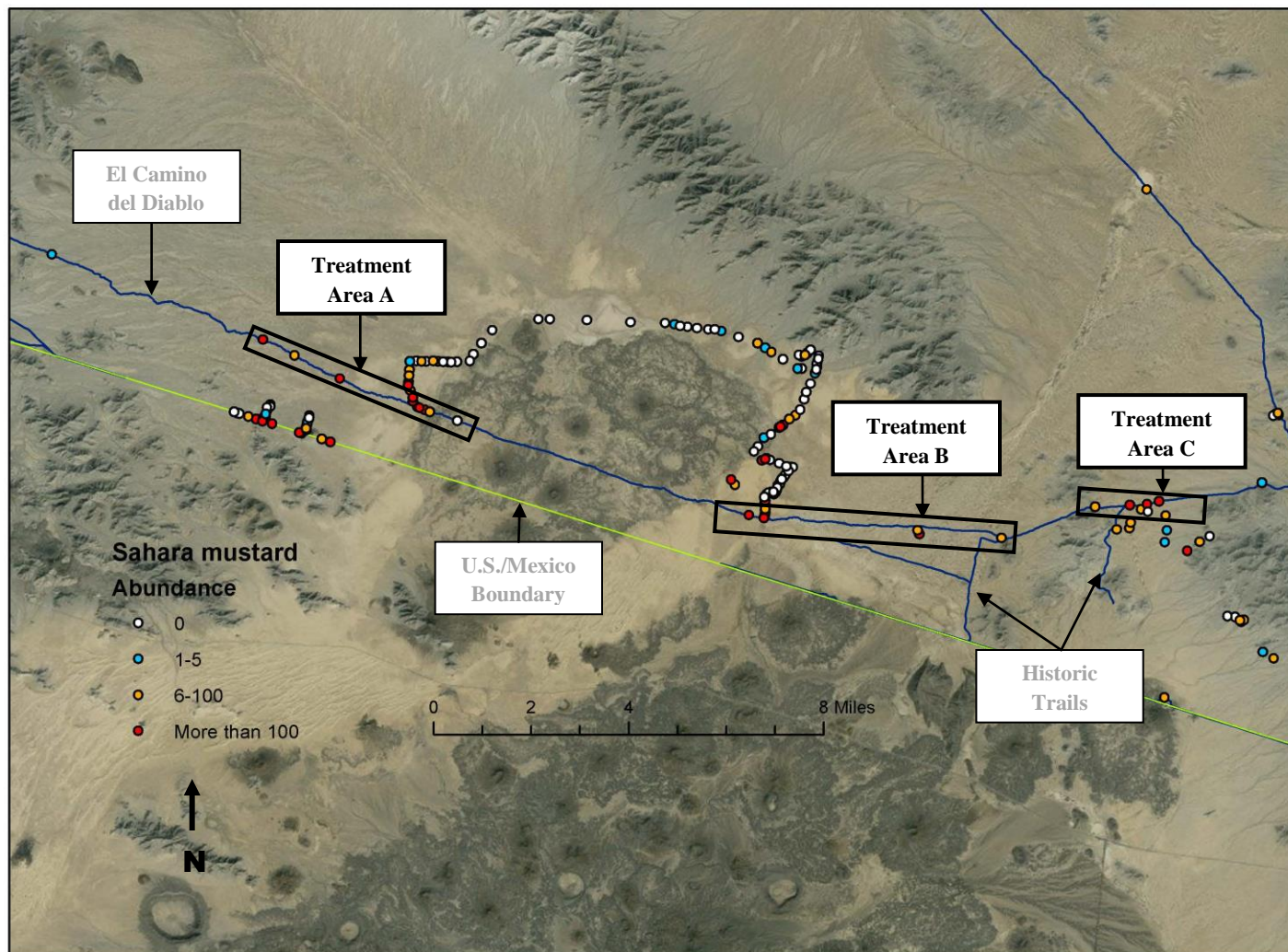
Trader, M. R., M. L. Brooks, and J. V. Draper. 2006. Seed production by the non-native *Brassica Tournefortii* (Sahara Mustard) along desert roadsides. MADRONO, Vol. 53, No. 4, pp. 313–320.

United States Fish and Wildlife Service. 2007. Cabeza Prieta National Wildlife Refuge Comprehensive Conservation Plan Wilderness Stewardship Plan and Environmental Impact Statement. FES 06-37. 668 pp.

U.S. Fish and Wildlife Service. 2006. Biological Opinion for the Cabeza Prieta National Wildlife Refuge Comprehensive Conservation Plan, Arizona (22410-2006-F-0416). 65 pp.

Project Leader: _____

Date: _____

Map 1. Proposed *Brassica tournefortii* treatment areas on CPNWR.

4/2014

Photo 1. Photo of *Brassica tournefortii* on the Pinta Sands region, CPNWR.



Photo 2. Photo of *Brassica tournefortii* in the Pinta Sands region, CPNWR.



NEPA COMPLIANCE CHECKLIST

Project Name/Description: Treatment and Removal of Sahara mustard (*Brassica tournefortii*) along the non-wilderness corridor of the El Camino del Diablo, Cabeza Prieta National Wildlife Refuge.

Cabeza Prieta National Wildlife Refuge (CPNWR) is proposing to use chemical treatment as a means of controlling *Brassica tournefortii*, within the non-wilderness 200 foot buffer of the El Camino del Diablo public use road. Three treatment areas have been identified and are, in order of priority: Treatment A - West Side of Pinta Sands, Treatment B – East Side of Pinta Sands, and Treatment C – Customs and Border Protection Camp Grip.

Please see the attached Environmental Action Statement for a complete description of the proposed action and alternatives.

This proposal X is; ___ is not completely covered by categorical exclusion in 43 CFR Section 46.205-215 and/or 516 DM 8.5

516 DM 8.5 B (9): Minor changes in existing master plans, comprehensive conservation plans, or operations, when no or minor effects are anticipated.

The categorical exclusion above covers the proposed action because the CPNWR Comprehensive Conservation Plan Wilderness Stewardship Plan (USFWS 2007) Goal 1 Wildlife and Habitat Management, Objective 20, strategy #3 states: Where new or isolated small infestations of invasive plants are located, refuge staff will eradicate them using hand pulling or **appropriate chemical means** to prevent the spread of infestations.

Extraordinary Circumstances:

Will This Proposal (check (✓) yes or no for each item below):

Yes	No	
___	<u>X</u>	1. Have significant impacts on public health or safety.
___	<u>X</u>	2. Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas.
___	<u>X</u>	3. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA Section 102(2)(E)].
___	<u>X</u>	4. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.
___	<u>X</u>	5. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.
___	<u>X</u>	6. Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.
___	<u>X</u>	7. Have significant impacts on properties listed or eligible for listing on the National Register of Historic Places as determined by either the bureau.
___	<u>X</u>	8. Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species.
___	<u>X</u>	9. Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.
___	<u>X</u>	10. Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898).
___	<u>X</u>	11. Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007).
___	<u>X</u>	12. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112).

(If any of the above extraordinary circumstances receive a "Yes" check (✓), an EA must be prepared.)

X Yes ___ No This project includes additional information supporting the Checklist. [Attach if applicable or list if on file]

Environmental Action Statement